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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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10/536,928

05/31/2005

Kazuhiro Yamada

MATS:060

2470

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EXAMINER

MA, CALVIN

ART UNIT

PAPER NUMBER

2629

MAIL DATE

DELIVERY MODE

12/15/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

| | | | |
|------------------------------|--------------------------------------|---|--|
| Office Action Summary | Application No. 10/536,928 | Applicant(s) YAMADA, KAZUHIRO | |
| | Examiner CALVIN C. MA | Art Unit 2629 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 September 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2,5-10 and 13-16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2,5-10 and 13-16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

1. The proposed reply filed on 09/02/2008 has been entered and considered, the prior art Tanaka et al. (US Pub: 2003/0052841) is cited for the new ground introduced.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1-2, 5-10, and 13-16 are rejected under 35 U.S.C. 102(e) as being anticipated by Tanaka et al. (US Pub: 2003/0052841).

As to claim 1 and 9, Tanaka teaches a method as well as a device (i.e. a plasma display system) (see Fig. 1, [121]), displaying an image in which a single field is made of a plurality of subfields weighted with brightness (i.e. the plasma display having variety of subfield, SF1, SF2, ...) (see Table 2, Fig. 6) and a plurality of pieces of emission pattern information (i.e. the pattern look up table LUT), which show an emitted state with "1" and a non-emitted state with "0," of a pixel for each subfield, are used for displaying

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one gradation level (i.e. the subfield coding circuit interact with LUT to select the correct pattern to display) (see Fig. 6, [124-131]), wherein an average value of gradation levels shown by each of the plurality of pieces of emission pattern information, is equal to one of the gradation levels; and

an average emission rate (APL), which is the plurality of pieces of emission pattern information averaged by each subfield, of any subfield with brightness weight smaller than maximum brightness weight of a subfield in which an average emission rate thereof is not zero, is equal to a given threshold or greater (i.e. since the total brightness of the plasma display is a result of all of the subfield in the pixel performing together, the APL is a range of possible value in a continuum of actual display output factors which is tracked by the display system to insure the correct gradation conversation yield the correct subfield setting) (see Fig. 6, [126-129]),

wherein a given level of gradation is displayed by timewise changing each of the plurality of pieces of emission pattern information, for one pixel (i.e. since the display of image on a plasma display with subfields is a composition of time based change in a given pixel the level of gradation is naturally a result of timewise changing of the pattern of fields in each pixel which is stored in LUT) (see Fig. 6).

As to claims 5 and 13, see claims 1 and 9 above, claims 5 and 13 differ from claim 1 and 9 in the limitation of "wherein a given level of gradation is displayed by spatially arranging each of the plurality of pieces of emission pattern information, for a plurality of adjacent pixels". Tanaka teaches wherein a given level of gradation is

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displayed by spatially arranging each of the plurality of pieces of emission pattern information, for a plurality of adjacent pixels (i.e. the APL is translated into have a '1' and '0' patterned displayed on the entire plasma display so that the overall gradation is outputted and thus the pattern information is also encapsulated in the LUT which is outputted to the actual display itself) (see Fig. 5, [132-142]).

As to claims 2, 6, 10, and 14, Tanaka teaches a device as well as a method of displaying an image as claimed in claims 1, 5, 9, and 13, wherein the given threshold is 0.5 (i.e. since the tables of Tanaka's subfield clearly shows that the level can be set to have of the value of '1' and '0' in the subfield, this half luminance level would be naturally represented as 0.5 on a 1 to 0 scale of measurement) (see Fig. 1,6, [0132-0141]).

As to claims 7-8 and 15-16 Tanaka teaches wherein a given level of gradation is displayed by spatially arranging each of the plurality of pieces of emission pattern information, for a plurality of adjacent pixels(i.e. the APL is translated into have a '1' and '0' patterned displayed on the entire plasma display so that the overall gradation is outputted and thus the pattern information is also encapsulated in the LUT which is outputted to the actual display itself) (see Fig. 5, [132-142]).

Response to Arguments

Applicant's arguments with respect to claims 1-16 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Inquiry

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Calvin Ma whose telephone number is (571)270-1713. The examiner can normally be reached on Monday - Friday 7:30 - 5:00 EST.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chanh Nguyen can be reached on (571)272-7772. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Calvin Ma/
12/8/2008

/Chanh Nguyen/
Supervisory Patent Examiner, Art
Unit 2629